

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

City of Chicago - Department of Water
Mayfair Pumping Station
Attn: Conrad Bazylewski - MOMJWPP
1000 East Ohio Street
Chicago, Illinois 60611

Application No.: 96030185

I.D. No.: 031600BED

Applicant's Designation:

Date Received: March 31, 2005

Subject: Boilers

Date Issued:

Expiration Date:

Location: 4850 West Wilson Avenue, Chicago, 60630

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of 6 boilers and 2 fuel oil tanks pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., Nitrogen Oxides (NO_x), Carbon Monoxide (CO) and Sulfur Dioxide (SO₂) less than 100 tons per year each). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits issued for this location.
2. The Permittee shall utilize distillate fuel oil (Grades No. 1 and 2) in the boiler and generators with a sulfur content greater than the larger of the following two values pursuant to 35 Ill. Adm. Code 214:
 - a. 0.28 weight percent, or
 - b. The weight percent given by the formula: Maximum weight percent sulfur = (0.000015) x (Gross heating value of oil, Btu/lb).
 - c. Organic liquid by-products or waste materials shall not be used in these fuel combustion emission sources.
 - d. The Illinois EPA shall be allowed to sample all fuels stored at the above location.

3. Emissions and operation of the boilers shall not exceed the following limits:

a.

Natural Gas Usage	
<u>(Million Cubic Feet/Mo)</u>	<u>(Million Cubic Feet/Yr)</u>
78.8	945.6

<u>Pollutant</u>	<u>Emission Rate</u> <u>(Lb/10⁶ scf)</u>	<u>Emissions</u>	
		<u>(Lbs/Month)</u>	<u>(Tons/Year)</u>
NO _x	100.0	7,880	47.28
CO	84.0	6,619	39.72
SO ₂	0.6	47	0.28
VOM	5.5	433	2.60
PM	7.6	599	3.59

b.

Fuel Oil Usage	
<u>(Gallons/Month)</u>	<u>(Gallons/Year)</u>
15,006	180,072

<u>Pollutant</u>	<u>Emission Rate</u> <u>(Lb/1,000 gal)</u>	<u>Emissions</u>	
		<u>(Lbs/Month)</u>	<u>(Tons/Year)</u>
NO _x	20.0	300	1.80
CO	5.0	75	0.45
SO ₂	39.76	597	3.58
VOM	0.34	5	0.03
PM	2.0	30	0.18

- c. These limits are based upon standard emission factors (AP-42 1.3 Rev. 9/98, and 1.4 Rev. 3-98). Compliance with annual limits shall be determined from a running total of 12 months of data.
4. This permit is issued based on negligible emissions of volatile organic material (VOM) from the storage tanks. For this purpose, total emissions from the storage tanks shall not exceed nominal emission rates of 0.1 lbs/hour and 0.44 tons/year.
5. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.
- 6a. The Permittee shall maintain records of the following items, and such other items as may be appropriate to allow the Illinois EPA to review compliance with the limits in this permit.
- i. Natural gas usage (mmft³/year);
 - ii. Fuel oil usage (gallons/year); and

- iii. Monthly and annual emissions of NO_x, CO, PM, SO₂ and VOM with supporting calculations (tons/month and tons/year).
- b. All records and logs required by this permit shall be retained at a readily accessible location at the source or at the Department of Water Offices for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
- 7. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
- 8. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

If you have any questions on this, please call George Kennedy at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:GMK:psj

cc: Illinois EPA, FOS Region 1
Illinois EPA, Compliance Section
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the pumping station operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, e.g., 100 tons per year of NO_x at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less fuel is used, and control measures are more effective than required in this permit.

<u>Units</u>	<u>Fuel</u>	<u>NO_x</u>	<u>E M I S S I O N S</u> (Tons/Year)			
			<u>CO</u>	<u>SO₂</u>	<u>VOM</u>	<u>PM</u>
6 Boilers	Natural Gas	47.28	39.72	0.28	2.60	3.59
	#2 Oil	1.80	0.45	3.58	0.03	0.18
2 Storage Tanks					<u>0.44</u>	
	Totals	<u>49.08</u>	<u>40.17</u>	<u>3.86</u>	<u>3.07</u>	<u>3.77</u>

GMK:psj